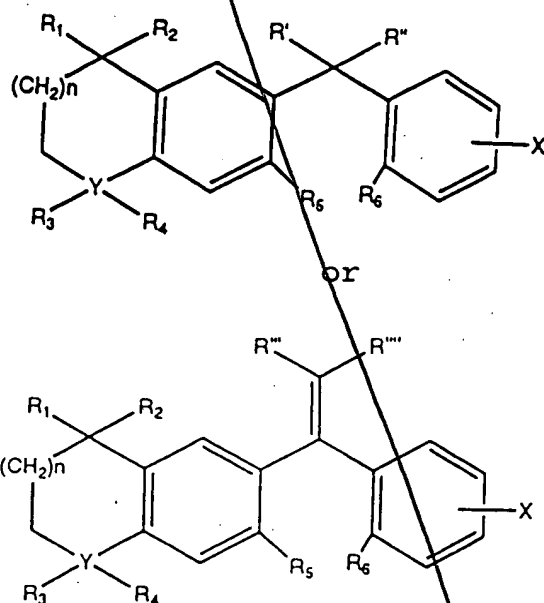


45. A compound having the formula:



wherein

$R_1$  and  $R_2$ , each independently, represent hydrogen or lower alkyl having 1-4 carbon atoms;

Y represents C, O, S, or N;

$R_3$  represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C or N;

$R_4$  represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C, but  $R_4$  does not exist if Y is N, and neither  $R_3$  or  $R_4$  exist if Y is S or O;

$R'$  and  $R''$  represent hydrogen or lower alkyl having 1-4 carbon atoms;

or  $R'$  or  $R''$  taken together form an oxo (keto), methano, cyclopropyl or cycloalkyl group and wherein the cyclopropyl and

cycloalkyl groups can be substituted with lower alkyl having 1-4 carbons;

R' and R'' represent hydrogen or lower alkyl having 1-4 carbon atoms;

R<sub>5</sub> represents hydrogen or a lower alkyl having 1-4 carbons or OR<sub>7</sub>, but R<sub>5</sub> cannot be hydrogen if R<sub>6</sub> is hydrogen and R' and R'' taken together form an oxo or a methano;

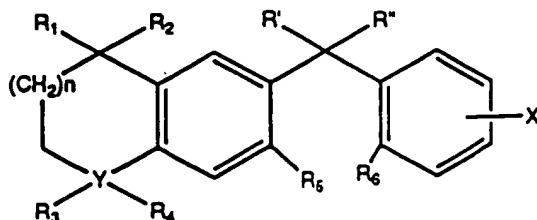
R<sub>6</sub> represents hydrogen;

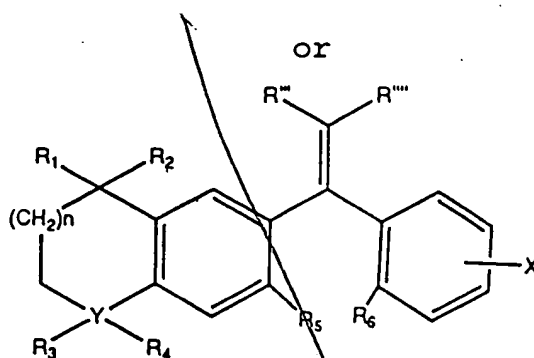
R<sub>7</sub> represents hydrogen or a lower alkyl having 1-6 carbons;

X is COOH and can originate from any C on the ring; and

n = 0-1.

46. A pharmaceutical composition for control of cellular processes regulated by retinoid compounds, Vitamin D, or thyroid hormone, comprising an effective regulating amount of a bicyclic aromatic compound, or a pharmaceutically acceptable ester, amide or salt thereof, in combination with a pharmaceutically acceptable carrier, wherein the bicyclic aromatic compound has the structural formula:





wherein:

*Sub*  
*EN*  
*cont'd*  
 $R_1$  and  $R_2$ , each independently, represent hydrogen or lower alkyl having 1-4 carbon atoms;

Y represents C, O, S, or N;

$R_3$  represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C or N;

$R_4$  represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C, but  $R_4$  does not exist if Y is N, and neither  $R_3$  or  $R_4$  exist if Y is S or O;

$R'$  and  $R''$  represent hydrogen or lower alkyl having 1-4 carbon atoms,

or  $R'$  or  $R''$  taken together form an oxo (keto), methano, cyclopropyl or cycloalkyl group and wherein the cyclopropyl and cycloalkyl groups can be substituted with lower alkyl having 1-4 carbons;

$R'''$  and  $R''''$  represent hydrogen or lower alkyl having 1-4 carbon atoms;

$R_5$  represents hydrogen or a lower alkyl having 1-4 carbons or OR, but  $R_5$  cannot be hydrogen if  $R_6$  is hydrogen and  $R'$  and  $R''$  taken together form an oxo or a methano;